

# Classroom Strategies for Children with Cochlear Implants

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# Before you get started....

- Lets make sure the child is hearing  
**optimally!**



# CI Troubleshooting-should be taught to you at the beginning of the school year!

- Know your make, model and all the parts in case you have to call someone!
- Know the current program, volume and/or sensitivity so you know if they are correct. (keep a chart if helpful)
- Ask parents and professionals to show you the device when it is working optimally.

*Ask for the specific troubleshooting guide and review before trouble arises!*



- Know your troubleshooting tools- microphone tester, system sensor, lights, beeps –each processor has different features
- Functional Listening Test- Ling 6

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# The Ling 6

## An Auditory-only task

- Detection-I hear it
- Identification- objects or pictures
- Repeating task
- Get baseline distances and monitor
- Consider individual ear information
- Keep a daily record



# Ling 6 check

- See handout for sample chart-conduct  
**BEHIND** the child---out of eyesight



# MONITOR PROGRESS DAILY

- CHECK Ling 6 every day
- Monitor auditory and speech/language progress every day.
- Have a system for communicating with parents and teachers about progress, especially regression



- Slow progress or no progress can be equipment or programming problems that can be improved. Don't wait until the 9 week juncture to say something. Every minute counts!



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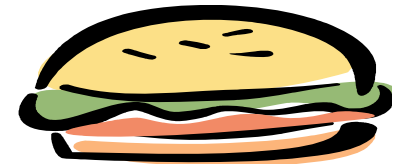
# FACTORS WHICH CAN INFLUENCE RATE OF PROGRESS

- Consistent use
- Programming of the device
- Pre-post lingual/duration of deafness
- Age of implantation
- Emphasis on visual input vs. auditory input
- Other learning factors/disabilities
- Family support



# AUDITORY TECHNIQUES

- Auditory Sandwich



- 1<sup>st</sup> presentation is verbal to ensure auditory processing
- 2- tactile or visual cues as necessary
- Final cue is auditory – again to promote listening

- Wait time

- to allow the child to process the information.



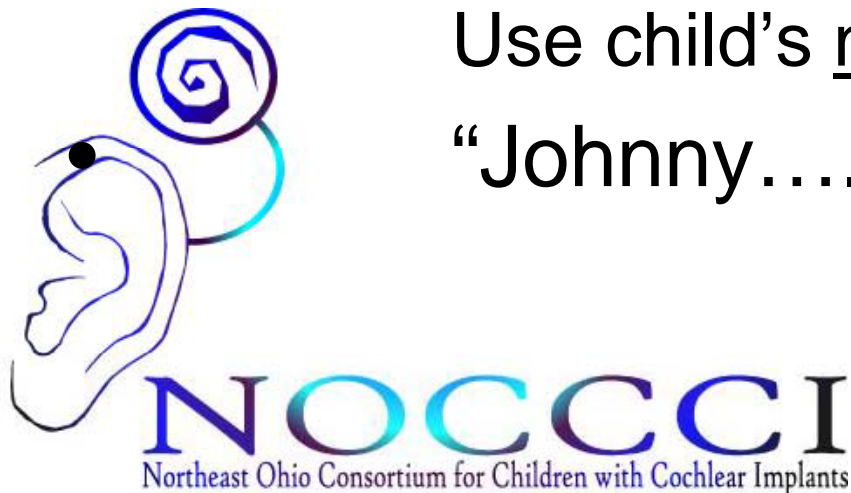


# Auditory Techniques

**Acoustic Highlighting** -enhances the audibility of the spoken message

- Use duration, intensity and pitch to highlight words within phrases

Use child's name to gain their attention  
“Johnny....”



# Auditory Techniques

- **Verbally Repeat Comments and Questions Presented in Class** –so they hear both the question and answer
- **Auditory Spacing-**  
chunk information





# Auditory Techniques

- **Cueing** with a microphone
  - “**Listen**” to gain attention
- **Pointing to your ear** to cue them to verbalize-indicate if you did not hear
- **Emphasis** is on
  - you **hearing** them

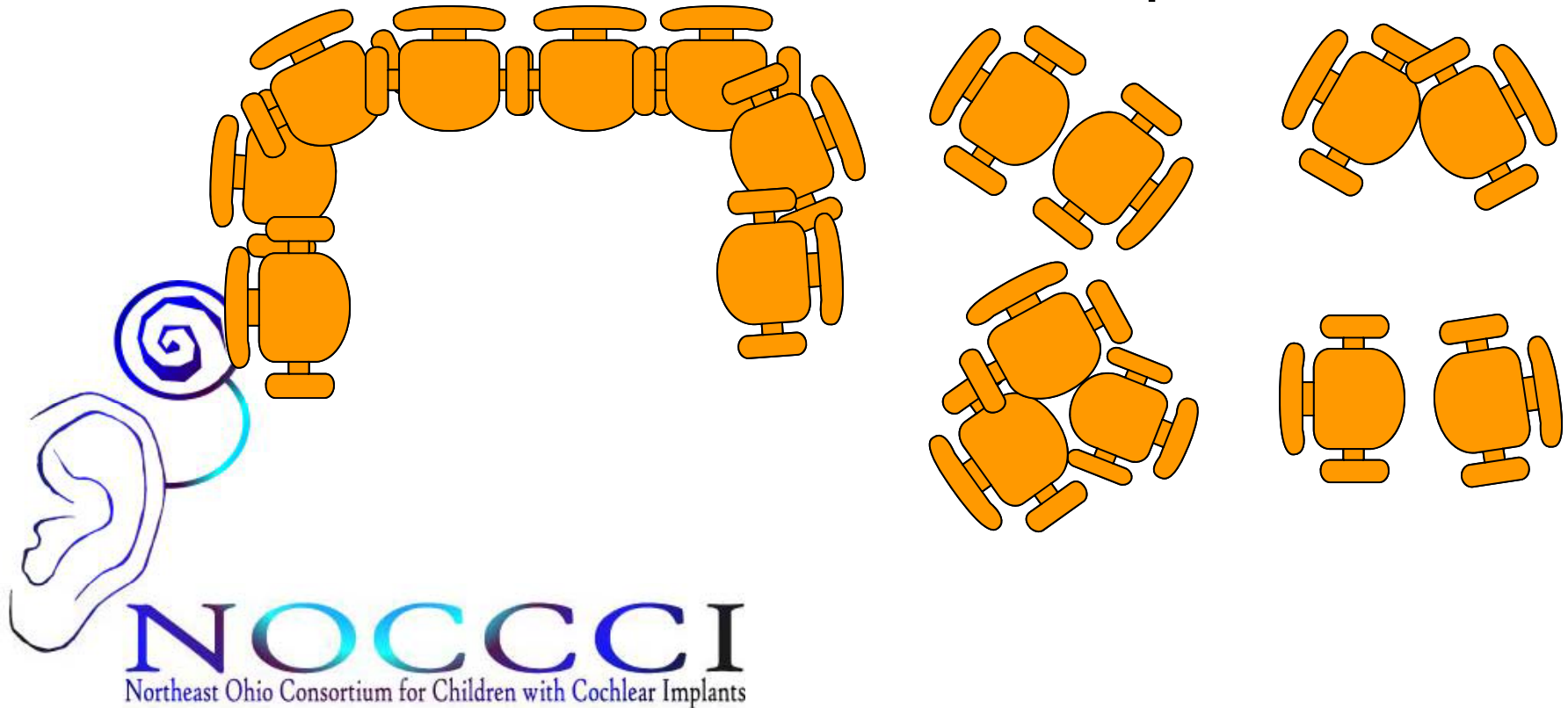


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# Classroom Auditory strategies

- **Preferential seating-** usually not front row first seat – consider the best auditory and visual situation for teacher and peers



# Classroom auditory strategies

- **Use of pass around microphone** when children are reading or answering questions/ask your audiologist about ordering



# Classroom Auditory Strategies

- **Call on all children by their name** so child with hearing loss can track the speaker



# Classroom Auditory Strategies

- **Teach all children to find and look at the speaker** (track who is talking)



# Classroom Clarification Strategies

- **Ask what was said** to all children so there is a listening/comprehension expectation for everyone

–Avoid asking, “**Did you hear me?, Did you understand me?**”

–Instead, ask, “**What did I say?**”





# Classroom Strategies

- **Work on the child becoming an active listener** and becoming more responsible for information/strategies--this may have to be formally practiced before this occurs
- **Keep them close** when the FM/sound field is not in place (hallways, bus, cafeteria)-explain to others that “distance” away from the child matters



# Curriculum Based Goals—A Team Approach

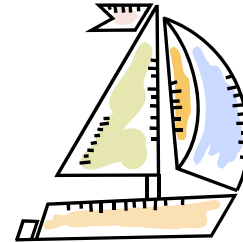
- Send home classroom language, words to poems or songs, vocabulary, literature and themes for
  - auditory, language, speech, pragmatic and written language goals whenever possible.
  - » Share state standards with SLP to tie together classroom and SLP therapy goals.



# Classroom Strategies

- Don't forget to review “the language of instruction”
- It's tempting to only “show” them what you want but you will be in the same

next time



- **make sure they understand the language you are using in the classroom**



# RED FLAGS

- Inconsistent use
- Resistance to wearing the device
- Equipment problems
- Difficulty with detection of sound
- Difficulty identifying the Ling 6 sounds
- Changes in behavior
- Regression of skills –auditory, language, speech



# Classroom Adaptations

(Rose, 2008)

- See handout (H. Rose, 2008)



## Classroom observation checklist for children with hearing loss

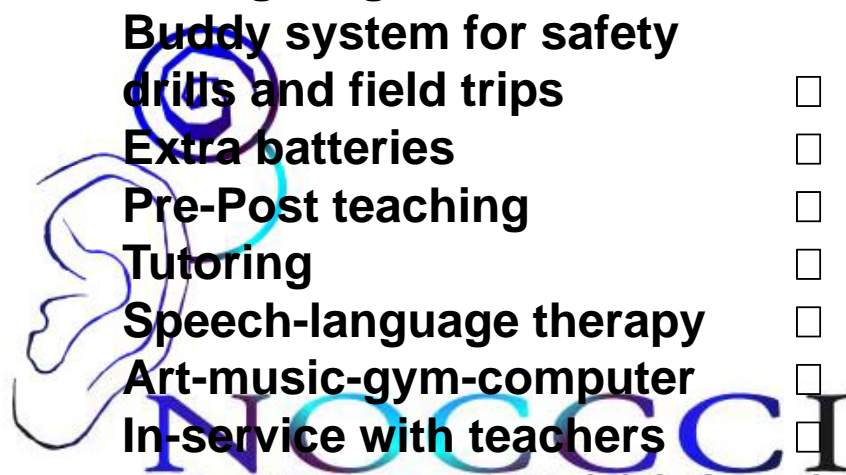
Name: \_\_\_\_\_

Grade: \_\_\_\_\_

Date: \_\_\_\_\_

- |                           |                          |       |
|---------------------------|--------------------------|-------|
| Preferential seating      | <input type="checkbox"/> | _____ |
| Sound- field              | <input type="checkbox"/> | _____ |
| Pass around microphone    | <input type="checkbox"/> | _____ |
| Information thru speakers | <input type="checkbox"/> | _____ |
| Tennis balls-carpet       | <input type="checkbox"/> | _____ |
| Computer patch cord       | <input type="checkbox"/> | _____ |
| Closed captioning         | <input type="checkbox"/> | _____ |
| Static addressed          | <input type="checkbox"/> | _____ |
| Moisture addressed        | <input type="checkbox"/> | _____ |
| Strong magnetic fields    | <input type="checkbox"/> | _____ |
| Buddy system for safety   |                          |       |
| drills and field trips    | <input type="checkbox"/> | _____ |
| Extra batteries           | <input type="checkbox"/> | _____ |
| Pre-Post teaching         | <input type="checkbox"/> | _____ |
| Tutoring                  | <input type="checkbox"/> | _____ |
| Speech-language therapy   | <input type="checkbox"/> | _____ |
| Art-music-gym-computer    | <input type="checkbox"/> | _____ |
| In-service with teachers  | <input type="checkbox"/> | _____ |

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# Cochlear Implant Precautions

see handout

- Static
- Moisture
- Magnetic Fields



# How does therapy for a child with a cochlear implant look different from traditional speech therapy?

## Auditory Learning!

### Children with Cochlear Implants

- Varied amount of auditory learning experience due to length of hearing loss, amplification history, cause of hearing loss and other factors





# Auditory Learning

- Auditory Learning involves the ability to pick up a sound, process the sound, recognize the sound, and comprehend the sound.

## CHILDREN WITH NORMAL HEARING:

Learning begins prenatally (the auditory system is developed by the 20<sup>th</sup> week)



# Teach Listening Skills

To be “Auditory Learners” children need to be able to detect, discriminate, identify, and comprehend spoken communication

SOUND AWARENESS: Perceive a sound; be aware a sound occurred

DISCRIMINATE: Be able to determine if two sounds are the same or different

IDENTIFY: Be able to meaningfully match a sound to its meaning

COMPREHEND: Be able to detect, discriminate, identify, and understand what is heard



# Sound Awareness

Children need to know when they ARE and when they ARE NOT hearing a sound

- Draw attention to sounds
- Create sounds for children to hear
- Ling 6 or 7 sound test



# Discrimination

## Same or different activities

(Remember: These steps are fluid. When a child “masters” a step, you can and may need to revisit it when the child is attempting other goals)



# Identification

Children can demonstrate that they know what was said by uniquely demonstrating what they heard

- Learning to Listen sounds
- Syllable differences



# Comprehension

Children use the previous steps in order to make meaning out of what they have heard

They know the word even when used in conversation

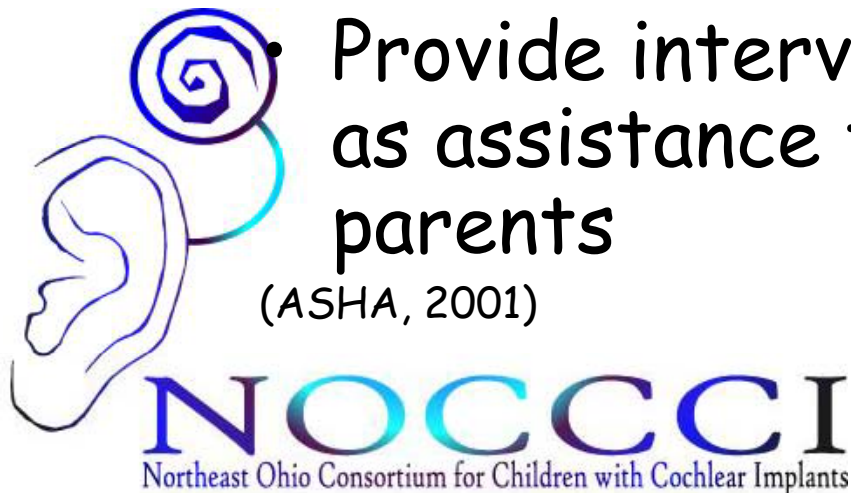


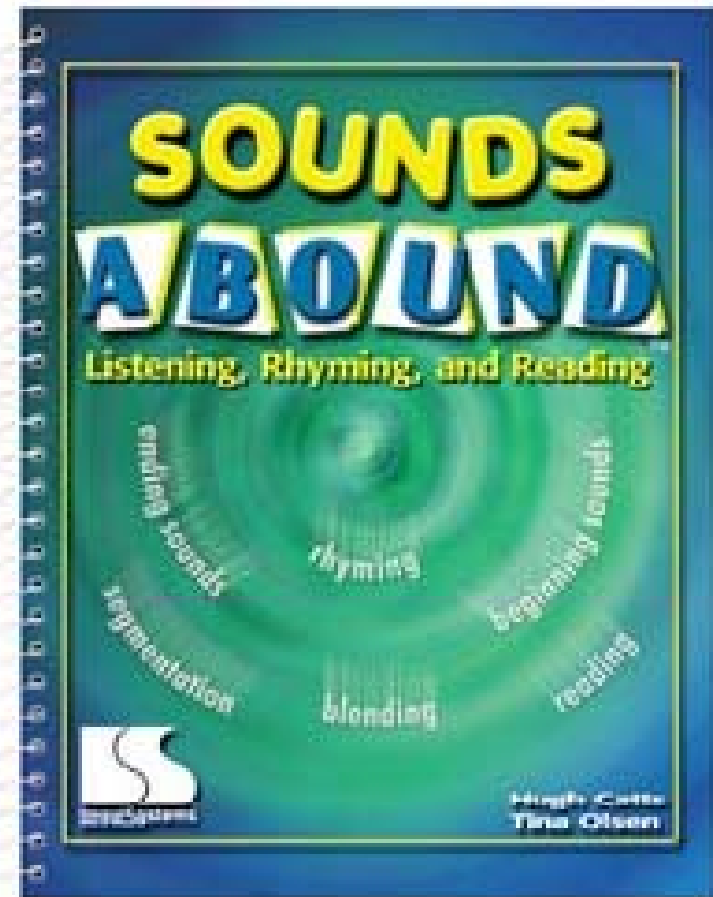
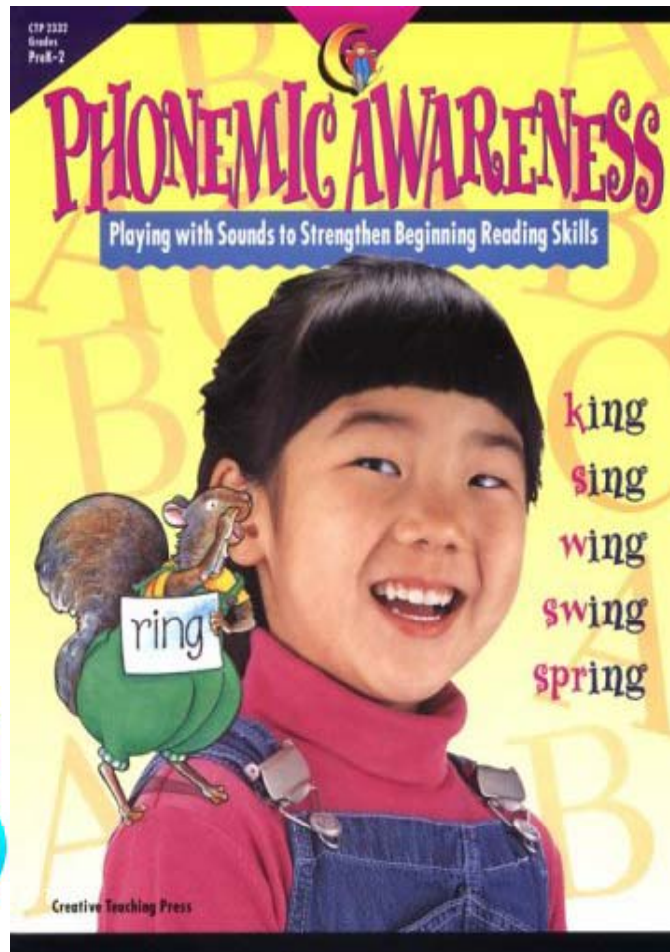
# The SLP's Role in Literacy

- Prevent reading problems by fostering language acquisition & emergent literacy
- Identify children at risk for literacy problems

- Provide intervention to children as well as assistance to classroom teachers & parents

(ASHA, 2001)





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### **Phonemic Awareness Activities: Playing with Sounds**

**Sound Isolation Activities-** Encourages children to think about sounds in words and listen for sounds at the beginning, middle, or end of a word.

Tune: "Old MacDonald Had a Farm"

Beginning sounds: What's the sound that starts these words: Turtle, time, and teeth? (wait for response) /t/ is the sound that starts these words: turtle, time, and teeth. With a /t/, /t/ here and a /t/, /t/ there, here a /t/, there a /t/ everywhere a /t/, /t/. /t/ is the sound that starts these words turtle, time, and teeth.

**Sound Matching Activities-** Letter sounds are emphasized, not the letter name. Teacher says phoneme sound not the letter name.

Tune: "Jimmy Cracked Corn and I Don't Care"

Who has a (phoneme sound) to share with us? Who has a (phoneme sound) to share with us? Who has a (phoneme sound) to share with us? It must begin with the \_\_\_\_ sound. Elicit responses from the children then sing: (Child's response) is a word that starts with \_\_\_\_\_. (Child's response) is a word that starts with \_\_\_\_\_. (Child's response) is a word that starts with \_\_\_\_\_. (Child's response) starts with the (phoneme) sound. (Use children's names to motivate).

**Blending Activities-** Children blend isolated sounds to form words.

Game: What am I thinking of?

The teacher states that he/she is thinking of an animal (or anything theme related) then gives a clue which is the separate sound in the word making sure each sound is



articulated separately. The children blend the sounds together to guess what the teacher is thinking.

**Sound Addition or Substitution Activities-** By adding or substituting sounds in words, children begin to focus on sounds.

Tune: "I've Been Working on the Railroad" (starting with the section,

"Someone's in the Kitchen with Dinah")

I have a song that we can sing. I have a song that we can sing. I have a song that we can sing. It goes something like this : Fe-fi-Fiddly-i-o: Fe-fi-Fiddly-i-o-o-o-o, Fe-fi-Fiddly-i-oooo, Now try it with the /z/ sound.

**Segmentation or Analysis Activities-** Isolating the sounds in a spoken word. One of the more difficult phonemic awareness tasks to perform. It is highly related to later success in decoding words.

Tune: "Twinkle, Twinkle Little Star"

This works best with words that have no more than 3 sounds (phonemes). Listen, listen to my word. Then tell me all the sounds you heard: (example: say "race" slowly) /r/is one sound, /a/ is two, /s/ is last in race, it's true! Thanks for listening to my words, and telling all the sounds you heard!

Yopp, Hallie. (1992). Developing phonemic awareness in young children, Reading Teacher, 45 (9), 696-704.

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American Speech-Language-Hearing Association. (2001). *Roles and responsibilities of speech-language pathologists with respect to reading and writing in children and adolescents (position statement)*. Rockville, MD: Ad Hoc Committee on Reading and Written Language Disorders.

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\*Fitzpatrick, J. (1997). *Phonemic awareness: Playing with sounds to strengthen beginning reading skills*. Cypress, CA: Creative Teaching Press, Inc.

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Waldowski, K. (2003, February 10). Storybooks for preschoolers at risk: A naturalistic approach to promoting emergent literacy. *Advance for Speech-Language Pathologists & Audiologists*, 6-7.

Yopp, H. (1992). Developing phonemic awareness in young children. *The Reading Teacher*, 45(9): 696-703.

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### Additional Resources:

\*Adams, M. (1997). *Phonemic awareness in young children*. Baltimore, MD: Brookes Publishing.

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\*Blanchman, B. (2000). *Road to the code: A phonological awareness program for young children*. Baltimore, MD: Brooks Publishing.

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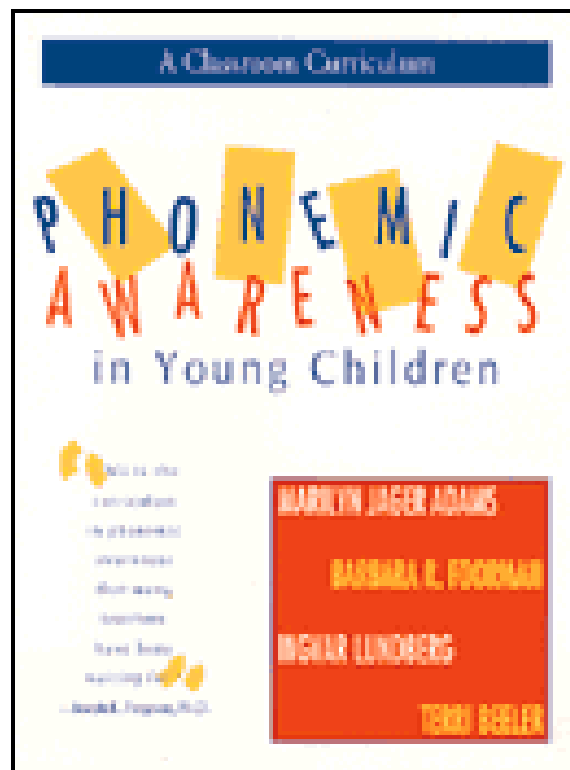
Lombardino, Lieberman & Brown. (2005). *Assessment of Language & Literacy*. Pearson, Inc.

Yopp, H. (1995). Teaching reading. *The Reading Teacher*, 48(6): 538-542

\*commercially available



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A Classroom Curriculum:  
Phonemic Awareness in  
Young Children

M. Adams, B. Foorman,  
I. Lundberg, & T. Beeler  
(2003), Brookes  
Publishing

# Sharing Books and Stories to Promote Language and Literacy



A Volume in the Emergent and Early Literacy  
Series

Anne van Kleeck

Plural Publishing, 2006

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# Resources Available:

(This list is certainly not all-inclusive!)

- The Speech Perception Instruction Curriculum and Evaluation (SPICE) –Central Institute for the Deaf [www.cid.edu](http://www.cid.edu)
- Word Associations for Syllable Perception (WASP)- Mary Koch, MA, CED  
[www.bionicear.com](http://www.bionicear.com)
- Cottage Acquisition Scales for Listening, Language, and Speech (CASLLS)- Elizabeth Wilkes, PhD, CED, CCC-SLP [www.sunshinecottage.org](http://www.sunshinecottage.org)



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- Listening Games for Littles- Dave Sindrey, M.Cl.Sc., Cert AVT  
[www.wordplay.ca](http://www.wordplay.ca)
- The Listening Room –Advanced Bionics  
[www.hearingjourney.com](http://www.hearingjourney.com)
- Listen, Learn, and Talk – Cochlear  
<http://www.cochlearamerica.com/Support/170.asp>

# More Resources

***The cochlear implant manufacturers are all committed to helping children with cochlear implants. Visit each manufacturer's website for information especially designed for therapists and educators!***

- Advanced Bionics: [www.bionicear.com](http://www.bionicear.com)
  - Tools for Schools



- Cochlear Corporation: [www.cochlear.com](http://www.cochlear.com)
  - Habilitation Outreach for Professionals in Education



- Med-El Corporation: [www.medel.com](http://www.medel.com)
  - Bridge to Better Communication







Life is not measured by the  
number of breaths we take, but  
by the moments that take our  
breath away.



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